THE REFORM OF EDUCATION IS AT LEAST A FOUR-LEGGED PROGRAM

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I begin with a statement of regret: We all would like to exhibit an easy-to-copy behavior-analytic remedy for the current cumulating disaster in American education; we all respect the Los Horcones community as a correct, intelligent, systematic, comprehensive, and working realization of many behavior-analytic principles at the level of community; and the Los Horcones people would like to publish this paper in JABA and thereby make their success with education a gift to the world. The intersection of those three behavior classes should be easy to endorse. I regret not seeing the Los Horcones report as exactly that intersection.

First, I do not find anything new, or old but suddenly useful, in it. It is a good summary of the important elements of reinforcement systems for classroom application. It recommends the chain schedule as the basic tool; we all do. It recommends quietly descriptive social reinforcers rather than tangible tokens in those schedules; we all do, as soon as quietly descriptive social reinforcers prove practical. It recommends maximizing the clarity of the intrinsic consequences of correct responding as discriminative for the back-ups to follow; we all do. It recommends progressively distancing the intrinsic consequences from their back-ups, by delaying the back-ups and making them more intermittent; we all do. It recommends making the back-ups as natural as possible, as widespread as possible, and as accessible as possible; we all do. It acknowledges, once, that back-ups must first be powerful, and only after that criterion is met can they also be chosen for their natural qualities, if powerful natural reinforcers are available; we all do. But most of us emphasize much more how crucial this condition is to success, and how often it delays us from

achieving a fully natural arrangement. We all do all of that, some of us in practice and most of us at least at the level of recommendation, and we have for quite a long time.

The problem is that the Los Horcones report does not do three other things.

- 1. It does not offer the auxiliary, temporary procedures for the students whose behaviors are not controlled by the procedures it has described. There are students whose behavior is more reinforced by the intrinsic consequences of an infuriated teacher than by the knowledge that correct classroom behavior automatically bestows. There are students who have previously been taught that the knowledge that correct classroom behavior automatically bestows, like its natural back-up, is worthless. There are students who have previously been taught, and are concurrently being taught by family or peers, that gaining the knowledge automatically bestowed by correct classroom behavior is disloyalty to their family, their peers, and their race, ethnicity, social class, nationality, and the like. Indeed, in the behavior of many students one can find a wider variety of functions than these to interfere with the mechanisms being recommended in the Los Horcones report. None of these students is immune to eventual control by natural consequences, but the means of achieving that control, in my experience, involves, at least at first, quite a few more procedures than the ones described here, many of them not very intrinsic or natural. Furthermore, "at first" is not necessarily a brief period, and certainly is not an easy one. We should never let our audience assume that it is easy. The Los Horcones report might very well let them assume that.
- 2. It offers no commentary on those aspects of curriculum structure that are not matters of public policy: (a) on determining the structure of what we want to teach, (b) on the analysis of the stimulus controls necessary if a concept is to function as we

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prescribe and generalize as we prescribe, and (c) on the task analyses that must underlie successful teaching no matter how wonderfully effective the reinforcement technique (unless only the simplest, most primitive lessons are to be taught, or unless mastery and competence are not goals of instruction).

3. It does not recognize the problem in recommending the social adoption of an educational system different from our society's present one, philosophically far from its mainstream and widely recognized as that, and sure to attract fierce opposition from many powerful political groups in our society, especially teachers' unions.

Despite the absence of those three components of what must be a four-legged program in reforming American education, the Los Horcones report has the systematic purity and beauty of almost any manuscript from that community, and of almost any of their procedures. But I do not find anything more useful than the many earlier commentaries of almost exactly the same content that behavior analysts have published so often. And, if the authors truly mean to improve education, those other three components are necessary.

Why offer another of those one-legged stools? The audience that ought to buy it found out about it long ago, recognized quickly that it did not want it, and went another way—downward, as it is turning out. Is reminding them of what they decided not to buy back then likely to have any better effect now? I doubt it, especially if we offer an incomplete variant from a group instantly discriminable as different from almost all the societies to which our readers belong, operating a school different from all their schools.

If we thought that we ought to present our solution to our society one more time, perhaps under the stimulus controls summed up by our cultural slogans of "What the hell" and "Just for the record," we should present all four of the necessary legs:

1. We should ask Don Bushell to resurrect his Century School plan: It was a system much like this one, aimed at making immediate natural consequences effective by making them discriminative for at first contrived and natural, and eventually totally natural, back-ups. It was much more detailed (appropriate to dissemination), much more programmed for difficult and deviant entering students, built on commercially available materials arranged to embody what we know about curriculum, capable of quick implementation in most communities at very low cost, and would look familiar to most communities if its fundamental philosophical premises were left unexplored. The Century School was offered to one of our society's education agencies 15 years ago, already packaged; the agency needed only to open the box. It declined, of course.

- 2. We should ask the trio of Engelmann, Becker, and Carnine to repeat (for the thousandth time) everything they know about the structure of concepts and about how to program *all* of a concept's correct stimulus controls and *none* of the wrong ones, wrapping it in their package of Direct Instruction as they do so—another package just waiting to be opened.
- 3. We should find someone from the many who have successfully contained all the deviant, aberrant behavior that apparently diabolical, homicidal schoolchildren have ever inflicted on a classroom to describe the systematic packaging of those techniques within any of the reinforcement-curriculum packages available.
- 4. Then we should find someone from business or systems analysis or public policy (or the intersection of the three) to discuss *how* you might get a society to begin adopting a proven solution to one of its most important problems when it does not like the look of that solution. Bushell and his colleagues had thought through that problem in the late 1970s and packaged their proposals as part of the Century School's implementation procedures; perhaps some additional possible solutions have emerged since then.

If we did all that, and only if we did all that, we would have an exhibit of societal significance, and we could add the Los Horcones report as a beautiful exemplar of part of that logic and technique, albeit in the context of a self-contained community. But we should clarify its title: It may be

sufficient to improve education, but it is not complete enough to improve Education.

In summary, I note again the availability of those packages, thoroughly developed in all logistic details, ready to open and put to work, and probably with more research guaranteeing success than any societal adventure ever undertaken previously. This has been true for at least 10 years, published and publicized for at least 10 years, and ignored for at least 10 years. Perhaps there is a very urgent message in that. Or perhaps now is the time.

Or perhaps 10 years from now will be: Many office therapists in a wide variety of theoretical

paradigms remark that there is little use in advising clients before they are desperate for help: Until that point is reached, they do not usually return for a second session, or, if they do, they do not usually act on the advice they receive. Our society does not yet look that desperate to me, but they do look as if they will be fairly soon. We should remember that they will try every other education-relevant experiment first. At least they will solve the graffiti problem.

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